Initial Results from a Study of the Effects of Meditation on Multitasking Performance

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The Question
Can training in mindfulness meditation increase office workers’ capacity to perform information-intensive work in an effective and healthful manner?

Experimental Design

- **A**: Meditation
- **B**: Control
- **C**: Relaxation

8 weeks | 8 weeks

Multi-tasking test administered

Results

**task performance/strategy**
None of the groups showed post-training improvement in overall accuracy or speed, other than a practice effect. However, only the meditation group demonstrated a major change in multitasking strategy, namely, a marked tendency to spend more uninterrupted time on tasks, reducing fragmentation.

**memory**
Although participants in the meditation training group initially expected significantly (p=.03) less benefit than those in the relaxation or waitlist groups, they alone showed a significant memory improvement from pre-to post-training.

**emotional state**
All participants found the test stressful, as intended. For the meditation-training group (but not for the relaxation or waitlist groups), after training there was a decrease in self-reported negative affect, anxiety/tension, and fatigue following the stressful multitasking test, and in increase in sense of vigor.

**mindfulness**
Only the meditation groups showed an increase in self-reported daily mindfulness (a measure of deliberate attention to occurrences in their daily lives).

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Multitasking Test

- Researcher’s office
- Subject’s office
- Subject’s screen
- Video of subject’s desk space
- Email
- Phone call
- “knock knock”

**Subjects**
Human Resources Professionals (all women)

- N=18
- N=14
- N=14

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**Before & After**

- Before & after training
- Before & after meditation training

- Vigor/activity (POMS)
- Anxiety & tension (POMS)
- Negative affect (PANAS)
- Fatigue/inertia (POMAS)